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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/817,832	03/26/2001	Stephen John Beynon	GB92000009US1	7881

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EXAMINER

NGUYEN, VAN H

ART UNIT	PAPER NUMBER
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2126

DATE MAILED: 04/08/2004

8

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/817,832

Applicant(s)

BEYNON ET AL.

Examiner

VAN H NGUYEN

Art Unit

2126

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 January 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This Office Action is in response to amendment A filed January 26, 2004. Claims 1-23 are presented for examination.

Claim Rejections - 35 USC § 102

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Claims 1-23 are rejected under 35 U.S.C. 102(e) as being anticipated by **Wygodny et al.** (U.S. 6,282,701 B1).

4. As to claim 1, Wygodny teaches the invention as claimed including a distributed data processing system comprising a plurality of data processing nodes connected via a network, each node having a processor, memory and operating system capable of executing application programs, each of the operating systems including data exchange means, the nodes communicating by asynchronous messaging via respective data exchange means and each node including process-private interrupt handling means for indicating the presence of a command for a respective process in the data exchange means, a method for remote tracing from a local one of the data processing nodes of the execution of a process within an application program running on a remote one of the data processing nodes, the application program including its own local trace facility (*fig. 2 and abstract*), the method comprising the steps of:

Art Unit: 2126

- sending a trace command from a trace process running on the local data processing node into a data exchange means of the remote data processing node (*sends the TCI file 120 and a small tracing application called the agent 104 to a user 110... loading a client-side trace library 125 into the address space of the client 102; col.5, lines 25-53*);

- in response to the trace command, causing a process-private interrupt of a target process running on the remote data processing node (*attach the client-side trace library 125 to the client 102 involves replacing selected object code instructions ... with interrupt 'INT' instructions to create trace points; col.7, lines 24-67*);

- in response to the process-private interrupt, the target process writing trace information from the trace facility to the data exchange means of the remote data processing node (*The trace data collected by the client-side trace library 125 is written to the trace buffer 105... the agent 104 copies the contents of the trace buffer 105 to a trace log file 122; col.6, lines 1-20*);

- transmitting the trace information across the network; receiving in a data exchange means on the local data processing node, the trace information (*fig. 2*);

- in response to receiving the trace information, causing a process-private interrupt of the trace process (*col.27, lines 6-41*); and

- in response to the process-private interrupt, reading the trace information by the trace process, from the local data exchange means (*The analyzer 106 comprises a User Interface module that reads trace data...only the trace data needed for the display in the user interface at any given time is read from the log file 122; col.8, lines 1-20*).

Art Unit: 2126

5. As to claim 2, Wygodny teaches writing a trace command from a trace process into the local data exchange means; initiating the process private interrupt on the local data processing node in response to the trace command; transmitting the trace command across the network; and replicating the process-private interrupt on the remote data processing node in response to the trace command (*col.6, lines 1-20 and fig. 2*).
6. As to claim 3, Wygodny teaches after the step of causing a process private interrupt of a target process, the process private interrupt is re-enabled (*col.27, lines 6-41*).
7. As to claim 4, Wygodny teaches after the step of the target process writing trace information, the target process is re-started from the beginning of its execution (*col.6, lines 1-20*).
8. As to claim 5, Wygodny teaches the remote data exchange means and the local data exchange means are mailboxes (*figs. 1A, 1B*).
9. As to claim 6, Wygodny teaches each of the remote data exchange means and local data exchange means comprise separate mailboxes for the reading and writing trace information operations, respectively (*col.6, lines 1-54*).
10. As to claim 7, Wygodny teaches the trace information is encrypted on the remote data processing node (*col.5, line 25- col.6, line 54*).
11. As to claim 8, Wygodny teaches the trace information is decrypted on the local data processing node (*col.5, line 25- col.6, line 54*).
12. As to claim 9, Wygodny teaches the trace information is annotated. (*col.6, lines 1-54*).
13. As to claim 10, Wygodny teaches the network is the Internet (*col.6, line 25-col.7, line 23*).

14. As to claim 11, Wygodny teaches the trace information is viewed with a monitor of the data processing nodes. (*col.6, lines 1-54*).
15. As to claim 12, it is directed to a computer program product for implementing the method of claim 1, and is similarly rejected under the same rationale.
16. As to claims 13-23, they are directed to a system for performing the method of claims 1-11, and are similarly rejected under the same rationale.

Response to Arguments

17. Applicant's arguments filed January 26, 2004 have been fully considered but they are not persuasive.
18. In the remarks, Applicant argued in substance that (1) Clearly Wygodny does not have its own local trace facility. (2) The Examiner asserts that Wygodny teaches the step of, in response to the trace command, causing a process-private interrupt of a target process running on the remote data processing node. This too is incorrect. (3) The Examiner asserts that Wygodny teaches that, in response to the process-private interrupt, the trace information is read by the trace process, from the local data exchange means. Again, this is incorrect.
19. Examiner respectfully traverses Applicant's remarks:
- As to point (1), the recitation "the application program including its own local trace facility" has not been given patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of

Art Unit: 2126

a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

As to point (2), the Examiner believes that Wygodny's teaching "*attach the client-side trace library 125 to the client 102 involves replacing selected object code instructions ... with interrupt 'INT' instructions to create trace points*" (col.7, lines 24-67) reads-on "in response to the trace command, causing a process-private interrupt of a target process running on the remote data processing node" as claimed by Applicant.

As to point (3), the Examiner believes that Wygodny's trace log file in the developer site reads-on "the local data exchange means" as claimed, and Wygodny's teaching "*The analyzer 106 comprises a User Interface module that reads trace data...only the trace data needed for the display in the user interface at any given time is read from the log file 122*" (col.8, lines 1-20) meets the limitations as claimed by Applicant.

Accordingly, Wygodny is the relevant prior art reference.

Conclusion

20. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

21. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


22. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action

23. Any inquiry concerning this communication or earlier communications from the examiner should be directed to VAN H NGUYEN whose telephone number is (703) 306-5971. The examiner can normally be reached on Monday-Thursday from 8:30AM - 6:00PM. The examiner can also be reached on alternative Friday.

The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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